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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,475	09/14/2001	Koichi Gen-ei	81790.0211	6524

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EXAMINER.

NGUYEN, DUNG T

ART UNIT PAPER NUMBER

2828

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/954,475

Applicant(s)

GEN-EI ET AL.

Examiner

Dung (Michael) T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.



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**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 14-18, and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Nitsuta et al. (JP62026653).

With respect to claim 1-2, 14, and 26, Nitsuta show in Fig. 1 and 3 a semiconductor laser device comprising a laser chip 15 and a sub-mount 22 having a first surface on which the laser chip is provided and at least one second surface vertical to the first surface; wherein one of the second surface is inclined at an angle of 3 to 30 degrees to the emission facet.

With respect to claims 3, 15, and 27, Nitsuta show in Fig. 1 a shape of the first surface of the sub-mount is a rectangle.

With respect to claims 4, 16, and 28, Nitsuta show in Fig. 1 a shape of the first surface of the sub-mount is a parallelogram.

With respect to claims 5 and 17, Nitsuta show in Fig. 1 the laser chip is a square

With respect to claims 6 and 18, it would have been obvious to one having ordinary skill in the art at the time the invention was made to do so, since it is held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCP 1980).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitsuta et al. (JP 62026653) in view of Staskus et al. (USPN 5923692). Nitsuta disclose all limitations of the claims except for the sub-mount being provided on a heat sink. Staskus et al. teach a heat sink (Fig. 1A). For the benefit of cooling a laser device, it would have been obvious to one having

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ordinary skill in the art at the time the invention was made to provide Nitsuta a heat sink as taught by Staskus et al.

Claims 7, 9-13, 19, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitsuta et al. (JP 62026653) in view of Kawamura et al. (USPN 6452880 / relied on Foreign Application Priority Data of Dec.22, 1999 JP).

With respect to claims 9-11 and 22-23, Nitsuta disclose above all limitations of the claims except for two laser beams. Kawamura et al. teach two laser beams of 780nm and 650nm (Fig.4). For the benefit of a semiconductor laser device, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Nitsuta a laser chip with two laser beams as taught by Kawamura et al.

With respect to claims 7 and 19, Kawamura et al. show in Fig.4 the sub-mount material is Si.

With respect to claims 12 and 24, Kawamura et al. show in Fig. 3-4 the laser chip has electrodes 42 and 43 and the sub-mount has electrodes 45 and 46 connected with electrodes 42 and 43.

With respect to claims 13 and 25, Kawamura et al. show in Fig. 4 the sub-mount has slit between the electrodes.

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Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nitsuta et al. (JP 62026653) in view of the admitted prior art. Nitsuta disclose all limitations of the claim except for a diffraction grating, a collimator lens, a half-mirror, an objective lens, and a light receive element. The admitted prior art of this application teaches in Fig.9 a diffraction grating 602, a collimator lens 603, a half-mirror 604, an objective lens 605, and a light receive element 611. For the benefit of an optical pickup apparatus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Nitsuta a diffraction grating, a collimator lens, a half-mirror, an objective lens, and a light receive element as taught by the admitted prior art.

#### **Citation of The Pertinent References**

The following US patents are being made of record, even though they were not relied upon in this Office action, for being similar in subject matter, and may be relied upon in any future Office Actions: 2003/0031217, 5517479, 6448552, 4844581, and 6278681.

#### **Communication Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (703) 305-7159. The examiner can normally be reached on 8:30 - 17:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 306-5511 for regular communications and (703) 306-5511 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

Nguyen (Michael) Dung

  
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